

-31-

We claim:

Sub A¹ 7
1. A method for representing addressing information in a communication system, the
method comprising encoding at least one address using a regular expression and using the
5 regular expression in place of the at least one address.

Sub B 7
2. The method of claim 1, wherein the at least one address comprises at least one
X.121 address.

Sub A² 7
3. The method of claim 2, wherein using the regular expression in place of the at least
one address comprises storing the regular expression in a source address field of an
address configuration table.

Sub B 7
4. The method of claim 1, wherein the at least one address comprises at least one
MAC address.

Sub A³ 7
5. The method of claim 4, wherein using the regular expression in place of the at least
one address comprises storing the regular expression in a source address field of an
address configuration table.

20
6. The method of claim 1, wherein using the regular expression in place of the at least
one address comprises using the regular expression to specify at least one address of an
address pool.

25
7. The method of claim 1, wherein using the regular expression in place of the at least
one address comprises storing the regular expression in a management information base.

-32-

Sub A³ >

8. A network device comprising a storage including a regular expression representing at least one address.

Sub B⁵ 7

5

9. The network device of claim 8, wherein the storage comprises an address configuration table.

10. The network device of claim 9, wherein the regular expression defines a source address group.

11. The network device of claim 8, wherein the storage comprises a management information base.

12. The network device of claim 11, wherein the regular expression defines an address pool.

13. The network device of claim 8, wherein the storage comprises a routing table.

14. The network device of claim 11, wherein the regular expression defines a forwarding equivalence class for a routing table entry.

10
15

-33-

Sub A⁴ 7

15. An address configuration table for mapping a plurality of source devices in a source network to a single destination device in a destination network, the address configuration table comprising an address configuration table entry having a regular expression representing a plurality of source device addresses.

11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

Sub A47

- [illegible]